

# Claims

- [c1] A grain moisture meter comprising means (1,2) for introducing a grain sample into a test cell (3), said test cell comprising means for measuring the dielectric constant of the grain sample, and means for calculating the moisture content of said sample based on the measured dielectric constant, said meter further including a strike off element (7) for removing excess of grains delivered to the test cell (3), a bottom container (4) disposed under the test cell (3) and having such an extension that grains removed from the test cell (3) by the strike off element (7) will fall into said container (4), means for unloading grains from the test cell into said container (4), and means (5) for weighing the container and its possible content.
- [c2] The meter according to [c1], wherein the means (1,2) for introducing a grain sample into a test cell comprises a top container (1) comprising means (6) for determining temperature of the grain sample.
- [c3] The meter according to [c1], wherein it comprises means for transporting the bottom container (4) from a delivery position, in which the container is accessible to an operator of the meter, to a loading position, in which the container is disposed on the weighing means (5) and inaccessible to an operator of the meter.
- [c4] Means for determining temperature of a grain sample, wherein

said means (6) comprise at least one elongate conductive element (7,8) having a resistance dependent on the temperature and being bent in a pattern so that it covers a certain area, a sensor (9,10) for measuring the current flowing in the conductive element (7,8) and means for calculating the resistance of the conductive element based on the measured current and the temperature based on the calculated resistance value.

- [c5] Means according to [c4] , wherein said means (6) comprise a second elongate element (8) similar to the first conductive element (7) and running parallel thereto and in the same plane.
- [c6] Means according to [c4] wherein the at least one elongate conductive element (7,8) runs in a meandering path.
- [c7] Means according to [c4] , wherein the at least one elongate conductive element (7,8) is made of copper.
- [c8] Method of determining density of grains, comprising the steps of:
  - (a) filling a test cell (3) having a known volume with an excess of grains,
  - (b) removing the excess of grains from the test cell (3),
  - (c) gathering the removed excess of grains in a container (4) having a known weight when empty,
  - (d) weighing the container (4) together with the excess of grains,
  - (e) filling the container (4) with grains from the test cell (3) after the step of weighing the container (4) together with the excess of grains has been performed and weighing the container (4) together with its

content of grains, (f) determining a correction factor for the density of said grains, said factor being dependent on the weight of the excess of grains, and (g) calculating the density of the grains.